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| 14. ABSTRACT The National Defense Science and Engineering Graduate (NDSEG) Fellowship Program offers three-year fellowships as a means of increasing the number of U.S. citizens trained in science and engineering disciplines of military importance. Sponsored by the Army, Navy, Air Force and Defense Advanced Research Projects Agency (DARPA), these fellowships are offered to individuals who have demonstrated ability and special aptitude for advanced training in science and engineering. NDSEG Fellowships are awarded for study and research leading to doctoral degrees in mathematics, physical, biological, ocean and engineering sciences. This grant supported students sponsored by DARPA for 14 appointments beginning in academic year 1993/1994 and 17 appointments beginning in academic year 1994/1995. This report contains information on these students as well as NDSEG students supported beginning in academic year 1989 through the final class of students who started in academic year 1994/1995. | | | | | |
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Defense Advanced Research Projects Agency



National Defense Graduate Fellowship Program

Final Report

Grant # N00014-93-1-1199

September 1, 1993 - August 1, 1999

Submitted and Prepared by:

Jeffrey P. Jarosz and Michael P. Moore

Projects Office

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DARPA-NDSEG Graduate Fellowship Program

Grant N00014-93-1-1199

1 September 1993-31 August 1999

Final Report

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Projects Department

1. Introduction

Grant N00014-93-1-1199, as subsequently amended, provided \$3,686,854 for the support of the program from September 1, 1993 through August 31, 1999 for the fellows appointed in 1993 and 1994.

This report serves as ASEE's final program report.

2. Administration

ASEE made contact with each of the fellows upon notification from DARPA of their selection. ASEE was responsible for the payment of the fellow's stipends and tuition along with a departmental allowance provided to each fellow's graduate institution to cover various expenses related to the fellows' graduate education.

ASEE also had regular reporting requirements. At the end of each academic year, ASEE required all fellows to complete a summer plan form and a faculty adviser was asked to certify the student's progress. These academic reports were then compiled into a single report for DARPA. ASEE was also required to submit regular administrative and financial reports describing ASEE's grant management activities and providing a complete financial accounting for the period.

3. Financial management and reporting

Three grants plus amendments were awarded to conduct the program from August 1, 1989 through August 31, 1999. A total of \$10,752,161 were authorized to conduct the program for six groups of fellows (three years for each group) through August 31, 1999. ASEE periodically submitted vouchers for advance payment of student support and administrative expenses.

4. Stipend and Tuition Payments

From September 1989 through August 1990 ASEE paid fellowship stipends with personal checks

issued manually by ASEE's accounting department. Since September 1990, stipends have been deposited electronically into fellows' bank accounts on the first working day of each month. Fellows can elect to have stipends deposited into checking or savings accounts.

Tuition payments were made on behalf of the fellows to their respective graduate institutions. ASEE contacted the office of the bursar at each fellow's institution to receive the bills for the tuition and required fees. Upon receipt of the bill, ASEE would issue the appropriate payments.

Departmental allowances were paid to the fellows' graduate institutions at the conclusion of the academic year. After receiving the fellow's academic report and the advisor's certification of academic progress, the payments were issued

5. Statistics on DARPA-NDSEG fellows

101 DARPA-funded NDSEG fellows were appointed between 1989 and 1994. Of the 101, 15 fellows withdrew before their three year tenure had completed and two never attended graduate school. Of the 84 fellows who completed their three-year tenure, at least 70 received their Ph.D. based upon correspondence with ASEE after the completion of their tenure.

Women constituted a little less than a third of the appointments (32 out of 101) and only about a sixth of the appointees were from under-represented minority groups (16 out of 101). As a whole, non-minority males made up more half of the appointees (59 out of 101), with non-minority females representing a quarter of the appointments (26 out of 101). Three charts are included as Attachment A. Chart 1 shows the breakdown of appointees by gender, Chart 2 shows the breakdown of appointees by ethnicity, and Chart 3 shows the breakdown of appointees by gender and ethnicity.

DARPA-funded NDSEG fellows represented six of the possible 15 disciplines, Chemical Engineering, Computer Science, Electrical Engineering, Manufacturing Science & Engineering, Materials Science & Engineering, and Mathematics. More than two-thirds of the appointments (70 out of 101) were made in the disciplines Electrical Engineering (24 fellows), Materials Science & Engineering (25 fellows), and Mathematics (21 fellows). Chemical Engineering and Manufacturing Science & Engineering each had 14 fellows while Computer Science applicants received only 3 appointments, all in 1989.

Upon completion of their tenure, all fellows were sent a closing letter which encouraged the fellows to maintain correspondence with ASEE regarding their continuing academic progress. To that end, a tracking form was included with the closing letter requesting their mailing address, telephone number, and immediate plans regarding their education, whether or not they intended to continue towards the Ph.D. Forms received by ASEE indicated that most fellows intended to complete their doctorate and anticipated completion within a single academic year.

Two years after their fellowship concluded, ASEE sent another letter to each fellow inquiring about their current status. From the responses to these follow-up questionnaires, ASEE determined that at least 70 of the 86 fellows who completed their tenure had received their Ph.D.,

while fellows had decided not to pursue their doctorates. The remaining fourteen fellows did not respond to the questionnaire. Therefore, more than two-thirds and probably more than three-quarters of the DARPA-funded NDSEG fellows received their doctoral degree as a result of the support they received from this program.

Attachments:

Attachment A is a listing of all of the fellows appointed by DARPA from 1989 to 1994 with their graduate institution, whether or not they completed their three year tenure, the date of their Ph.D. (if known), and last-known employment. Attachment B is a chart showing the number of appointments per year and the number of confirmed Ph.D. recipients from each class and the number of drop-outs from each class. Attachment C is the Drop-Out Report listing all of the fellows who withdrew from the program prior to the completion of their tenure and the reasons they withdrew. Attachment D is a graph of the Appointments by Discipline for 1993 and 1994. Attachment E is a chart of selections by discipline for all appointees and for those who have received their Ph.D. from 1989 - 1994. Attachment F is a series of charts showing the breakdown, by gender and/or ethnicity for DARPA-funded NDSEG fellows. Attachment G is a compilation of comments ASEE received from fellows at the conclusion of their tenure.

1993 DARPA Appointees

| Name | School | Date of Ph.D. | Last Known Employer |
|------------------------|---------------------------------------|---------------|---------------------|
| Anderson, Edward | Massachusetts Institute of Technology | Yes | |
| Bray, Clark | Stanford University | Yes | 6/99 |
| Brown, Alexander | Stanford University | Yes | 8/98 |
| Gottlieb, Sigal | Brown University | Yes | 5/98 |
| Goyal, Vivek | University of California, Berkeley | Yes | 12/98 |
| Hildebrandt, Frederick | University of California, Berkeley | No | Withdrawn early |
| Lynn, Lapoe | University of California, Berkeley | No | Withdrawn early |
| Meshkinpour, Marjohn | University of California, Los Angeles | Yes | 6/96 |
| Moser-Roberts, Susan | Cornell University | Yes | 8/98 |
| Paraventi, Denise | University of Michigan | Yes | |
| Quon, Kenneth | Stanford University | No | Withdrawn early |
| Ruark, John | Massachusetts Institute of Technology | Yes | 6/98 |
| Thompson, Dwight | Stanford University | Yes | 12/99 |
| Trick, Kimberly | University of Dayton | Yes | Yes, no date |

1993 Appointments - 14

1994 DARPA Appointees

| Name | School | Date of Ph.D. | Last Known Employer |
|------------------------------|---------------------------------------|---------------|--------------------------------------|
| Barron, Richard | Massachusetts Institute of Technology | Yes | |
| Bernstein, Mira | | No | Accepted, never made further contact |
| Burr, Tracey | Massachusetts Institute of Technology | Yes | 6/98 |
| Chen, Brian | Massachusetts Institute of Technology | Yes | Tenure Extended |
| D'Amato, Rebecca | Massachusetts Institute of Technology | Yes | 6/98 |
| Del Buono, Michel | Stanford University | Yes | 9/99 |
| DiCarlo, Jeffrey | Stanford University | Yes | Tenure Extended |
| Evans, Lisa | Johns Hopkins University | No | Withdrawn early |
| Jewett Van Antwerp, Jennifer | University of Illinois | No | Withdrawn early |
| Jones, Kristala | University of California, Berkeley | Yes | 12/99 |
| Kesler, Olivera | Massachusetts Institute of Technology | Yes | 9/99 |
| Lin, Steven | University of California, Berkeley | Yes | 5/99 |
| Loveless, Michael | University of Utah | Yes | 12/97 |
| Moss, Gates | Northwestern University | Yes | 6/98 |
| Narayanaswami, Ramakrishna | University of California, Berkeley | Yes | 12/99 |
| Panzarella, Charles | Northwestern University | Yes | 6/98 |
| Scott, Wesley | Texas A&M University | Yes | 12/98 |

1994 Appointments - 17

Senior Research Associate at the Ohio Aerospace Institute

Employed by Merck & Company
Postdoctoral Fellow @ Massachusetts Inst of Tech
Quantitative Researcher at Arbitrade LLC
Faculty Member at Khon Kaen University in Thailand

1989 DARPA Appointees

| Name | School | Completed Tenure | Date of Ph.D. | Last Known Employer |
|----------------------|---|------------------|---------------|--|
| Alter, Tao | Massachusetts Institute of Technology | Yes | 6/95 | Postdoctoral Fellow @ MIT |
| Blair, David | Brandeis University | Yes | 5/93 | |
| Bronski, Jared | Princeton University | Yes | | |
| Daugherty, John | University of California, Berkeley | Yes | 12/93 | |
| Desch, Paul | Illinois Institute of Technology | Yes | 5/96 | Postdoctoral Fellow @ Los Alamos National Laboratory |
| Forstall, Bruce | University of California, Berkeley | Yes | | |
| Fowler, Burt | University of Texas | Yes | 12/92 | Employed by Sematech |
| Gaynor, Gavin | North Carolina State University | Yes | | |
| Hoppel, Christopher | Pennsylvania State University | Yes | 5/93 | Employed by U.S. Army Research Laboratory |
| Horigan, John | University of California, Berkeley | Yes | no | Employed by Intel Corporation |
| Hosch, William | University of Arizona | No | no | Withdrew early |
| Hufnagel, Todd | Stanford University | Yes | 6/94 | |
| Konstan, Joseph | University of California, Berkeley | Yes | | |
| Liberatore, Michael | Massachusetts Institute of Technology | Yes | 2/95 | |
| McComb, Todd | Rensselaer Polytechnic University | Yes | Yes, no date | |
| Nagorka, Michael | University of California, Santa Barbara | Yes | Yes, no date | Employed by Kaiser Aluminum & Chemical Corporation |
| Phan, Tan | North Carolina State University | Yes | 5/94 | |
| Roy, H. Scott | Stanford University | Yes | 9/93 | |
| Skaja-Robinson, Anne | University of Illinois | Yes | 12/93 | |
| Storch, David | Northwestern University | Yes | 3/93 | |
| Walton, Donnell | University of Michigan | Yes | 5/94 | Faculty Member at Howard University |
| Yen, Anthony | Massachusetts Institute of Technology | Yes | Yes, no date | Employed by Texas Instruments |

1989 Appointments - 22

1990 DARPA Appointees

| Name | School | Completed Tenure | Date of Ph.D. | Last Known Employer |
|-------------------|---|------------------|---------------|--|
| Boyd, Mary | Massachusetts Institute of Technology | Yes | 1996 | |
| Chance, Frank | Cornell University | Yes | 1993 | President, Chance & Robinson, Inc. |
| Chen, Katherine | Massachusetts Institute of Technology | Yes | 6/96 | Postdoctoral Fellow @ Los Alamos National Laboratory |
| Gonzalez, Carlos | North Carolina State University | Yes | 5/94 | |
| Grady, Brian | University of Wisconsin | Yes | 1/94 | Faculty Member at University of Oklahoma |
| Hague, Douglas | Pennsylvania State University | Yes | 1995 | Employed by Pratt & Whitney |
| Hoffoss, L. Diane | University of California, Santa Barbara | Yes | 6/95 | |
| Huff, Marilyn | University of Minnesota | Yes | 6/94 | |
| Jarvis, Tyler | Princeton University | Yes | 7/94 | |
| Keckler, Stephen | Massachusetts Institute of Technology | Yes | 6/96 | |
| Romano, David | University of California, Berkeley | Yes | | |
| Sears, Pamela | University of California, Berkeley | Yes | | |
| Wissuchek, Donald | University of California, Santa Barbara | Yes | 5/95 | |

1990 Appointments - 13

1991 DARPA Appointees

| Name | School | Date of Ph.D. | Last Known Employer |
|----------------------|---------------------------------------|---------------|--|
| Beissel, Stephen | Northwestern University | 12/94 | Employed by Alliant Techsystems |
| Christenson, Cheryl | University of Michigan | Yes, no date | Employed by Motorola |
| Cronin, Kathleen | Cornell University | 8/95 | Fellow at National Cancer Institute |
| Dris, Irene | Stanford University | 12/96 | Employed by General Electric |
| Eide, Ellen | Massachusetts Institute of Technology | 6/93 | Employed by IBM |
| Ervin, Carmelita | Louisiana State University | no | Withdrew early |
| Fuerlinger, Susan | University of Wisconsin | no | Withdrew early |
| Guyter, Jonathan | Northwestern University | 6/97 | |
| Jones, Martha | Cornell University | 1/97 | |
| Laird, William | Johns Hopkins University | no | Employed by Six Flags Great Adventure |
| Landau, Zeph | University of California, Berkeley | | |
| McDonnell, Charles | University of Minnesota | | |
| McGuire, Kenneth | University of Texas | 12/94 | |
| Montoya, Thomas | Georgia Institute of Technology | Yes, no date | |
| Morin, Christopher | Boston University | no | Withdrew early, National Guard obligations |
| Polashenski, William | Lehigh University | 10/95 | Postdoctoral Fellow @ Lehigh University |
| Selesnick, Ivan | Rice University | Yes, no date | |
| Simmons, Jane | Massachusetts Institute of Technology | 8/93 | Employed by Corvis Corporation |
| Speer, Stephen | University of Arizona | no | Withdrew early |
| Tepesch, Patrick | Massachusetts Institute of Technology | 5/95 | |
| Wills, Sheryl | Northern Illinois University | 1994 | Faculty Member at University of Wisconsin, Platteville |

1991 Appointments - 21

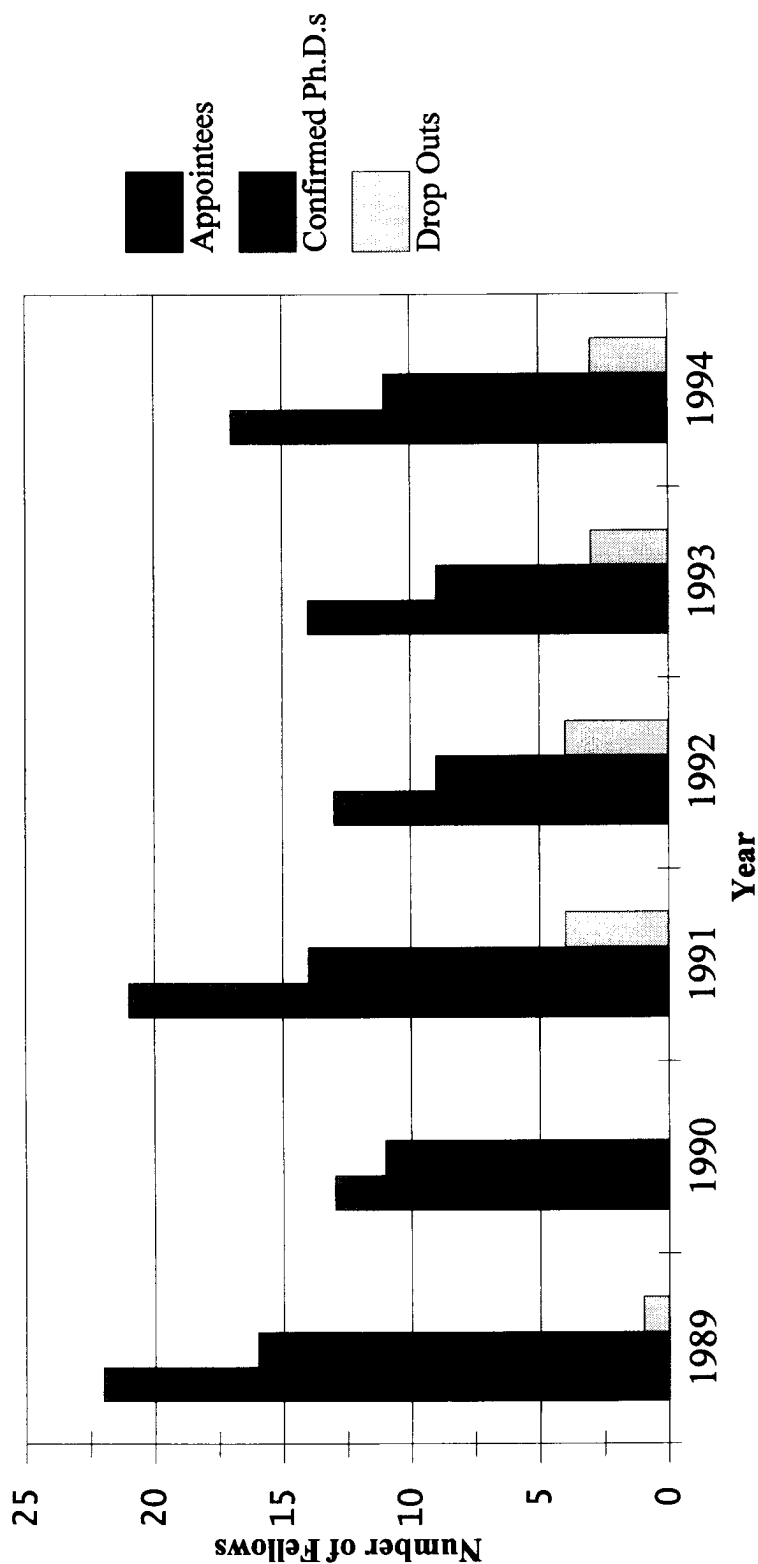
1992 DARPA Appointees

| Name | School | Date of Ph.D. | Last Known Employer |
|---------------------|---------------------------------------|---------------|---|
| Ansari, Mohsinuddin | Massachusetts Institute of Technology | no | Withdrew early |
| Brockman, William | University of California, San Diego | 6/97 | |
| Brown, Stanley | University of California, Berkeley | 12/97 | |
| Clay, Russell | Massachusetts Institute of Technology | 5/97 | Employed by Mobil Technology Company |
| Dejneka, Matthew | Rutgers University | 9/95 | Employed by Corning, Inc. |
| Kahn, Jeremy | University of California, Berkeley | no | Withdrew early |
| Kao, Camilla | Stanford University | 8/96 | |
| Lackey, Eileen | University of Mississippi | 5/96 | Faculty Member at University of Mississippi |
| Mullner, James | Carnegie Mellon University | no | Withdrew early |
| O'Connor, Caitlin | University of Washington | 12/96 | |
| Tracy, Sharon | Northwestern University | 6/97 | Employed by Wiss, Janney, Ellstner & Associates |
| Wang, Steven | University of Chicago | 8/98 | Faculty Member at Harvard University |
| Witzerman, James | Purdue University | Yes, no date | Employed by General Motors |
| Yu, David | | No | Accepted, never made further contact |

1992 Appointments - 13

DARPA Appointees

Appointments, Doctorates, & Drop Outs



DARPA-NDSEG Dropout Report

The DARPA-NDSEG fellows who forfeited their funding before obtaining their Ph.D were:

1989 Selections

Forstall, Bruce - Electrical Engineering

Bronski, Jared - Mathematics

1991 Selections

Fuerlienger, Susan - Manufacturing Engineering

Morin, Christopher - Manufacturing Engineering

Speer, Steve – Mathematics

Ervin, Carmelita - Manufacturing Engineering

Villeneuve, Randall – Oceanography

1992 Selections

Ansari, Mohsinuddin - Electrical Engineering

Kahn, Jeremy - Mathematics

Mullner, James – Manufacturing Science

1993 Selections

Lynn, Lapoe - Electrical Engineering

Hildebrandt, Frederick - Mathematics

Quon, Kenneth – Electrical Engineering

1994 Selections

Evans, Lisa - Mathematics

Jewett van Antwerp, Jennifer – Chemical Engineering

1989 Selections

Bruce Forstall earned his Master's Degree from University of California, Berkeley. Mr. Forstall withdrew from the NDSEG Fellowship Program after receiving his Master's Degree. Mr. Forstall indicated he wanted to pursue job opportunities in the computer software industry. He did not indicate his future plans to continue his doctoral studies at a later date.

Jared Bronski earned his Master's Degree from Princeton University. Mr. Bronski requested and was granted a leave of absence due to personal reasons. Mr. Bronski did not resume his fellowship after his leave of absence. He did not indicate his future plans to continue his doctoral studies at a later date.

1991 Selections

Susan Fuerlienger earned her Master's Degree from University of Wisconsin-Madison. Ms. Fuerlienger indicated she longer wished to continue her graduate studies after receiving her Master's Degree. Ms. Fuerlienger obtained employment after withdrawing from the NDSEG Fellowship Program. She did not indicate her future plans to continue her doctoral studies at a later date.

Christopher Morin attended Boston University. In October 1992 Mr. Morin was called to active duty in the National Guard. Mr. Morin enrolled in the National Guard flight school and expected to be out of the NDSEG Fellowship Program at least two years. Mr. Morin did not contact the NDSEG Fellowship any further once he was called to active duty. He did not indicate his future plans to continue his doctoral studies at a later date.

Steve Speer earned his Master's degree from University of Arizona. Mr. Speer asked for a leave of absence due to personal reasons after receiving his Master's Degree. Mr. Speer did not resume his NDSEG Fellowship after his leave of absence. He did not indicate his future plans to continue his doctoral studies at a later date.

Carmelita Ervin earned her Master's Degree from Louisiana State University. Ms. Ervin indicated she wished to withdraw from the NDSEG Fellowship Program after earning her Master's Degree. She stated she accepted a job opportunity in January 1994. Ms. Ervin did not indicate her future plans to continue her doctoral studies at a later date.

Randall Villeneuve withdrew from MIT before earning his Master's Degree. Mr. Villeneuve indicated he needed to withdraw from the NDSEG Fellowship Program due to personal reasons. He did not indicate his future plans to continue his doctoral studies at a later date.

1992 Selections

Mohsinuddin Ansari attended MIT's electrical engineering program. Mr. Ansari withdrew from graduate school before completing the NDSEG Fellowship due to personal reasons. Mr. Ansari indicated his intention to return to MIT and complete his Ph.D. after an absence of a year or two.

Jeremy Kahn attended the University of California, Berkeley's mathematics program. Mr. Kahn withdrew from graduate school before completing the NDSEG Fellowship.

James Mullner received his Master's degree from Pennsylvania State University before transferring to Carnegie Mellon University's manufacturing science program. Mr. Mullner withdrew from graduate school before completing the NDSEG Fellowship for personal reasons.

1993 Selections

Lapoe Lynn earned his Master's degree from University of California at Berkeley. Mr. Lynn accepted a full-time position at Analog Devices, Inc. He did not indicate his plans to continue his doctoral studies at a later date.

Frederick Hildebrandt dropped out from University of California at Berkeley in spring 1995. He did not write a formal letter asking to be removed from the program. Mr. Hildebrandt's academic advisors stated his grades were unsatisfactory and he failed his qualifying examination.

Kenneth Quon completed two years of graduate school at Stanford University. He did not receive his Master's degree. Mr. Quon asked for and received a leave of absence for personal reasons from the NDSEG Fellowship. He was not awarded another fellowship, but indicated he plans to continue his doctoral studies at a later date.

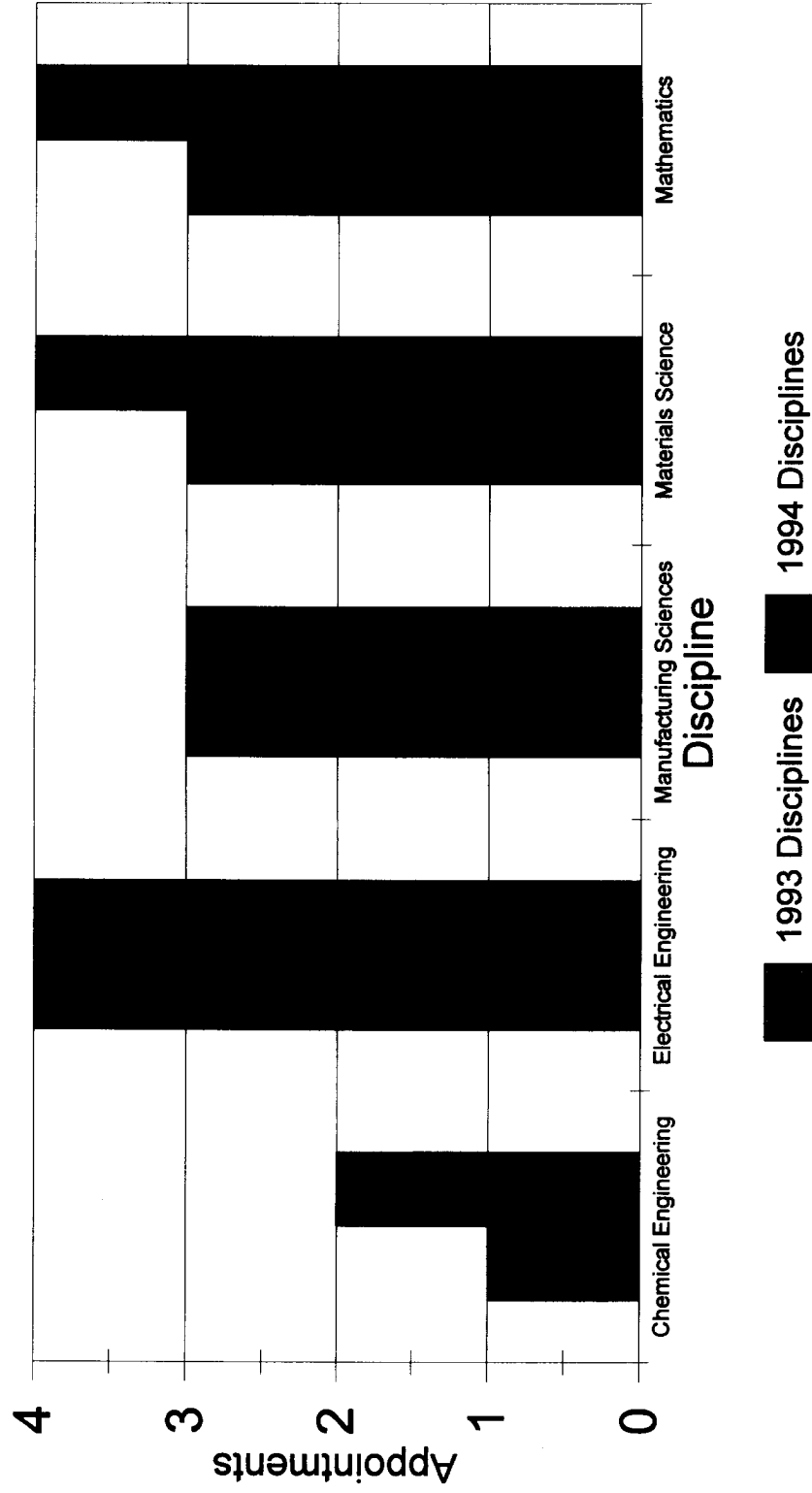
1994 Selections

Lisa Evans completed two years of graduate school at John Hopkins University. She did not receive her Master's degree. Ms. Evans asked for and received a leave of absence for personal reasons from the NDSEG Fellowship. She was not awarded another fellowship and did not state any plans to continue her doctoral studies at a later date.

Jennifer Jewett van Antwerp completed one year of graduate studies at University of Illinois-Urbana Champaign. Ms. Jewett accepted the Whitaker Foundation Fellowship, which began on September 1, 1995.

NDSEG Fellowship Program

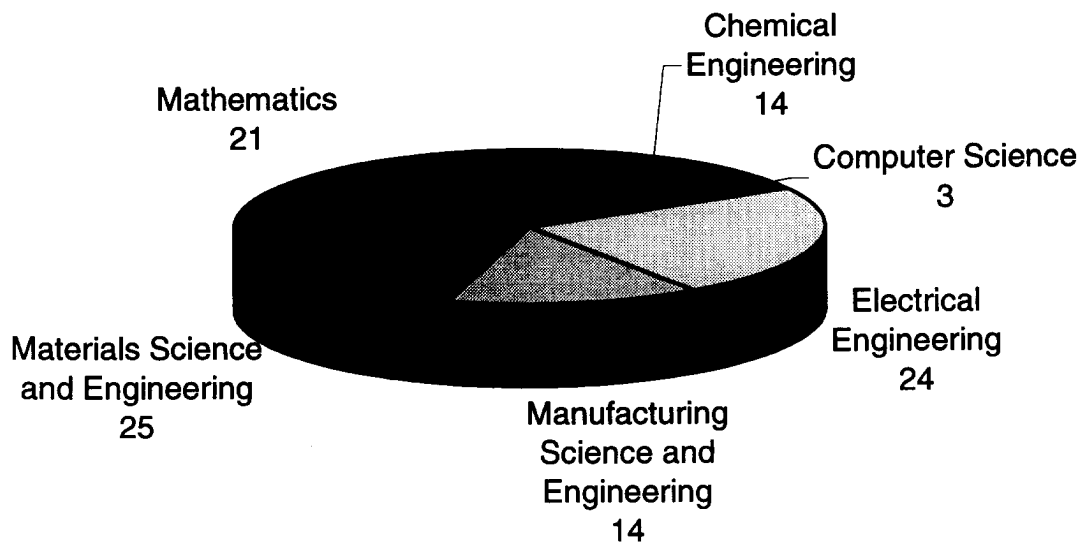
DARPA Selections by Discipline



DARPA-NDSEG Disciplines

| Disciplines | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | Totals |
|--|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Aeronautical and Astronautical Engineering | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Biosciences (includes Toxicology) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chemical Engineering | 2 | 3 | 4 | 2 | 1 | 2 | 14 |
| Chemistry | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cognitive, Neural, and Behavioral Sciences | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Computer Science | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| Electrical Engineering | 7 | 2 | 4 | 3 | 4 | 4 | 24 |
| Geosciences | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Manufacturing Science and Engineering | 0 | 2 | 4 | 2 | 3 | 3 | 14 |
| Materials Science and Engineering | 7 | 3 | 5 | 3 | 3 | 4 | 25 |
| Mathematics | 3 | 3 | 4 | 4 | 3 | 4 | 21 |
| Mechanical Engineering | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naval Architecture and Ocean Engineering | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oceanography | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Physics(includes Optics) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals: | 22 | 13 | 21 | 14 | 14 | 17 | 101 |

1989-1994 DARPA Fellows Discipline Analysis

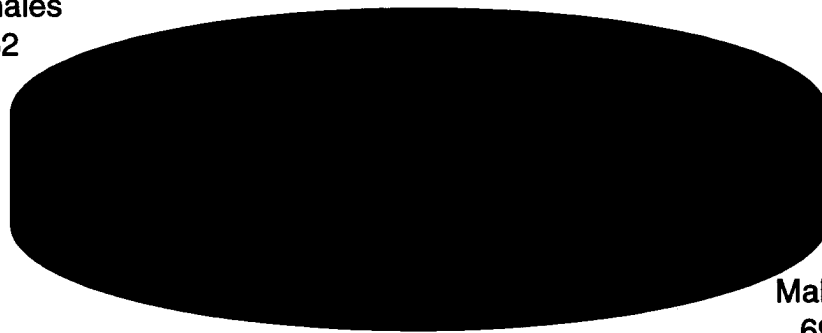


**1989 - 1994 DARPA-NDSEG Fellows
Ethnicity Table**

| Ethnicity | Males | Females | Totals |
|------------------|--------------|----------------|---------------|
| African American | 3 | 2 | 5 |
| Asian | 1 | 3 | 4 |
| Hispanic | 4 | 0 | 4 |
| Non-Minority | 59 | 26 | 85 |
| Pacific Islander | 0 | 0 | 0 |
| American Indian | 1 | 0 | 1 |
| Other | 1 | 1 | 2 |
| Totals | 69 | 32 | 101 |

1989-1994 DARPA-NDSEG Fellows Gender Analysis

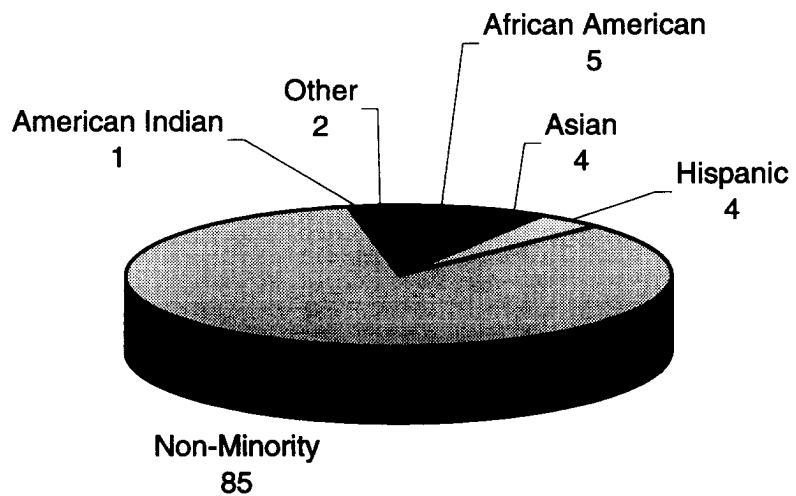
Females
32



Males
69

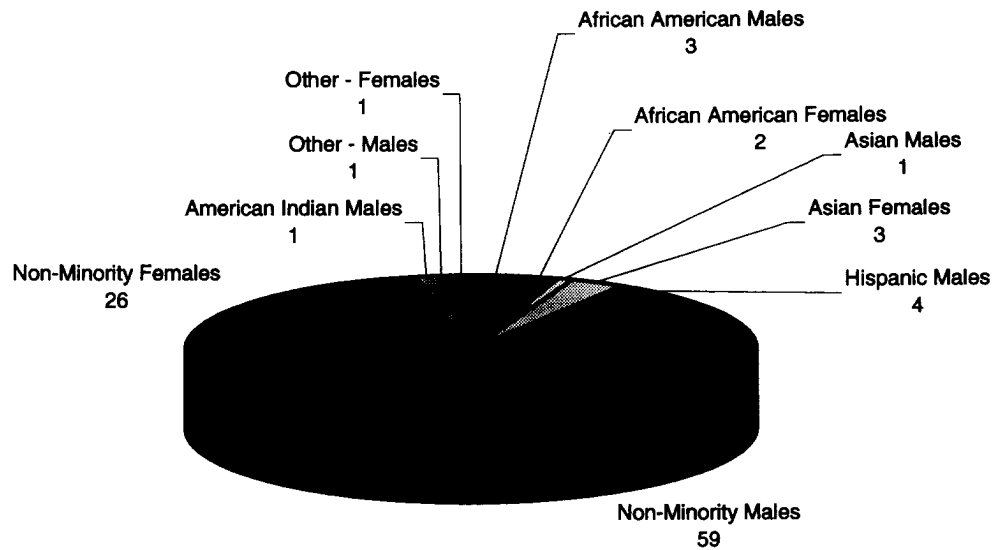
| 1989 - 1994 DARPA-NDSEG Fellows | |
|---------------------------------|-----|
| Males | 69 |
| Females | 32 |
| Total: | 101 |

1989-1994 DARPA-NDSEG Fellows Ethnicity Analysis



| | |
|------------------|------------|
| African American | 5 |
| Asian | 4 |
| Hispanic | 4 |
| Non-Minority | 85 |
| American Indian | 1 |
| Other | 2 |
| Total: | 101 |

1989-1994 DARPA-NDSEG Fellows Ethnicity Analysis



| | |
|--------------------------|------------|
| African American Males | 3 |
| African American Females | 2 |
| Asian Males | 1 |
| Asian Females | 3 |
| Hispanic Males | 4 |
| Non-Minority Males | 59 |
| Non-Minority Females | 26 |
| American Indian Males | 1 |
| Other - Males | 1 |
| Other - Females | 1 |
| Total: | <u>101</u> |

Attachment G: Comments from former fellows.

The former fellows' appreciation of DARPA's support is reflected in the following comments.

Tao Alter wrote: "The work I did as an DARPA fellow has been published in one conference and one journal, and it led to additional research which is expected to become two more journal publications. Thank you for those years of support."

Mary Boyd wrote: "The DARPA fellowship allowed me the opportunity to pursue a PhD after working and being away from the academic environment for several years. Without the support, I would not have returned to school. I am extremely grateful."

Paul Desch wrote: "The DARPA fellowship was responsible not only for the opportunity to pursue the PhD, but was also instrumental in my attaining recognition in the scientific community. It enhanced my ability to obtain a graduate research assistantship at the Center for Materials Science at Los Alamos National Lab. The DARPA fellowship played an integral part in my successful completion of this research project. Best wishes in obtaining and administering future awards in the DARPA fellowship program. I hope that Congress continues to fund these important awards, as they are essential for developing quality scientists to further the Nation's technological superiority."

Matthew Dejneka wrote: "Thank you for your assistance over the past three years. I hope that I will be able to develop technologies at Corning that will boost the US economy and technological prowess to fulfill DARPA's mission in the NDSEG fellowship."

Burt Fowler wrote: "I would like to take this opportunity to thank you, your coworkers and all of those involved in the NDSEG fellowship program. The fellowship was a great help to my wife and me for the past three years. Once again, thank you, and keep up the good work."

Carlos Gonzalez wrote: "Thank you very much for the excellent service your office offered me during the past three years. I can sincerely say that my experience as an NDSEG fellow was very positive. Once again thank you for always begin prompt to my requests and especially for always sending the stipend on time the first day of the month!"

Sigal Gottlieb wrote: "I thank you so much for this wonderful opportunity!"

Brian Grady wrote: "The fellowship was a wonderful benefit. It certainly was a major factor allowing me to do well in graduate school."

Douglas Hague wrote: "I won the Dow Chemical Award for PhD work in ceramic processing. I now work on ceramic TBCs and am funded through DARPA. I am currently running an DARPA-sponsored program, MDA972-95-3-0039, which directly impacts DARPA."

Diane Hoffoss wrote: "Thank you for giving me such a wonderful opportunity to pursue a PhD in mathematics with full concentration without having to worry about supporting myself. I have

accomplished much more in these three years than I would have with the additional responsibility of being a teaching assistant. I've used the time to foster a strong background in topology, and now that my coursework is completed I'm much more able to devote some time to teaching to support my studies. I'm very grateful for the powerful start you have given me in my graduate studies. I feel confident as I begin my dissertation research."

Christopher Hoppel wrote: "The fellowship was extremely helpful in allowing me to be an independent research engineer. It helped me start a productive career in the research and development of composite materials."

Martha Jones wrote: "I am happy to have the opportunity to update you and to reflect on the positive impact that being a DARPA fellow has had on my graduate career. In writing my thesis, I have come to recognize the significant impact that the freedom of outside support has had on my work. I am grateful for the opportunity I had to work with III-V semiconductor chemistry and growth techniques - without outside funding, there is little doubt that I would not have been able to explore that project at all, as our other research money is rather strictly tied to Si and Ge work. I feel very strongly that the fellowship programs should continue to receive funding."

Ellen Lackey wrote: "I give my strongest support for continued funding of the fellowship program. My participation in the program provided research and travel opportunities that would have not otherwise been possible."

Walter Laird wrote: "Thanks for everything! The program could not have gone any smoother for me. Your support has been outstanding. I was offered a position that I could not turn down and I use directly many of the skills learned because of your program at Johns Hopkins University."

Jane Simmons wrote: "Thank you for the fellowship: the program was very well run."

Anthony Yen wrote: "I am currently employed as a member of the technical staff at the Semiconductor Process and Design Center of Texas Instruments Inc., working on advanced lithography technology. This technology is critical to the survival and success of the US semiconductor industry, an industry vital to our national defense. Therefore, in my case, the purpose of the NDSEG fellowship - to increase the supply of US citizens trained in disciplines of science and engineering of military importance - has been fulfilled."